HOW DID YOUR GARDEN GROW?

Note to teachers: This supplement includes a discussion guide, activities, resources and Michigan Content Standards to use with the Michigan Time Traveler page. You may reproduce the pages in this supplement to use with students.

DISCUSSION GUIDE

(SOC.1.3. Analyze and Interpret the Past; ELA.3. Meaning and Communication in Context)

- The Mann Family and Their Home. Find Concord, in southwestern Jackson County, on a map. What was happening in Michigan history when the Mann's ancestors moved to the Concord area? (statehood, 1835-1837) Why did Daniel and Ellen Mann move to town from the farm? What style house did they build? Victorian architecture includes the Queen Anne, Italianate and other styles. Use an encyclopedia, books in your library or the Web to identify and discuss their characteristics.
- The Mann's Garden. Where did the Mann family and others in the village get their food? What other property—besides the home in town—did the Manns own? Why did they bring hay, straw, corn and oats to town from the farm? What did Mr. Mann "drive" to the farm each day?
- Uncovering Living Treasures. What do you learn about gardens from Kath's story? Do herbs grow best in sun or shade? (sun) How can you recondition and make soil better? (add fertilizers and worms)
- **Victorian Gardens**. What tasks involved physical work in the garden? Which tasks were not done in the garden? Why were all important?
- A Modern Gardener. How does Kaitlyn help her grandparents at the City Market? What do you think her grandparents have to do before they come to sell their flowers and vegetables at the market? Learn more about fresh air markets like this one. What impact have grocery stores and supermarkets had on fresh air markets? What are the benefits of each as places to buy food?

WORDS TO DISCUSS and LEARN

Annuals: a plant that lasts for one growing season

Biennial: a plant that needs 2 years to go from seed to seed Herbs: plants valued for medicinal, savory, or aromatic qualities Nutrients: nourishing substances taken in by a green plant and used for growth

The Old Farmer's Almanac: an almanac provides astronomical and weather information arranged according to the days, weeks, and months of a given year and other information. Published since 1792, this almanac developed a reputation for accuracy that made it a favorite with farmers.

Perennials: plants that live for an indefinite number of years

Produce: fresh fruits and vegetables

Seedlings: young plants grown from seed **Self-sustaining:** able to provide food for the family from its own land

Service area: area used by workers or for deliveries Shaker catalogs: In the 1810s, members of the Shaker religious community in Watervliet, NY, began selling seeds in small paper envelopes like those we use today. Their seeds were known for high quality.

Transplant: to remove a plant from one location and replant it in another place

Victorian: styles of architecture popular during the reign of Queen Victoria of England (1837-1901) and marked by elaborate details and decoration

ACTIVITY ONE: Make a Gardening Time Line

(SOC.I.1. Time and Chronology)

Using the "Victorian Gardens" article, make a time line of gardening tasks. Write the months of the year on the chalkboard and discuss the chores of a gardener, adding them to the time line where appropriate. Add other tasks the students suggest to the time line.

ACTIVITY TWO: Make a Landscape Plan

(SOC.II.2. Human/Environment Interaction; CES.1. Applied Skills; CES.2. Career Planning)

Landscape architecture is an interesting career, encompassing many kinds of knowledge that extend across the curriculum. Landscape architects work for parks and zoos, golf courses, owners of corporate and professional offices, home owners and others. Landscape architects analyze, design, plan, develop and manage the land. To do these things, they need to know about a variety of subjects: the environment, math and sciences such as geometry and botany, and cultural interests including sports and recreation. However, students don't need to become landscape architects to want to plan a special place for themselves.

Years ago the word "garden" meant the house's entire yard including the lawn, shrubs, trees, flowers, vegetable patch, fruit orchard, and recreation and service areas. One of the Mann sisters drew the plan of the Mann House yard (page 3). It is a simple landscape plan. (The front of the house, on Hanover Street, faces north.) Find these things on the Mann House plan: house, water pump, barn and horse stalls, pasture, vegetable garden, 7 maple trees, berry bushes, 4 pear trees, 2 plum trees, 3 apple trees, 2 rows of grape vines and a lilac.

After students examine the Mann House plan, ask them to sketch a plan for their own home, school or other familiar building in the other box on the page. (Turn sideways if property is horizontal rather than vertical.) Discuss what they found. How would they like to change it? Would they want places to play, to practice sports activities, to picnic, or to make a garden or an orchard? Form groups of 3-5 students. Ask each group to select one plan from the group and work together to redesign it with the ideas they discussed. Discuss and display the finished products in the classroom.

ACTIVITY THREE: Design a Seed Packet

(ELA.2. Meaning and Communication: Writing; ART.2.VA. Creating; SCI.III.2. Organization of Living Things)

Discuss: Gardeners obtain seeds in a variety of ways. Some let their plants "go to seed" in fall and collect the seeds to plant the next season. Farmers and large growers purchase seeds in bulk. Most gardeners buy the small paper seed packets sold in garden shops and supermarkets every spring. Bring some seed packets to the classroom and pass them around for students to examine. Explore the Web sites of seed companies such as Burpee, Ferry-Morse and Fredonia. Ask students to find and identify these different types of information on packets:

Brand Name
Price
Package Weight
Name of Plant (zinnia, basil)
Annual, biennial or perennial
Planting date (packed for...)
Variety (zinnia: scarlet splendor; basil: sweet)

Picture (photo or illustration)

Description and uses

Culture (when to plant, number of days until the see sprouts [germination], days till harvest, spacing, height, growth needs)

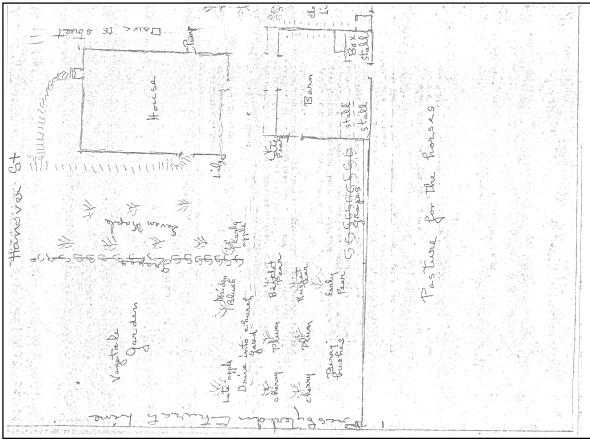
Tips or suggestions (where to use in

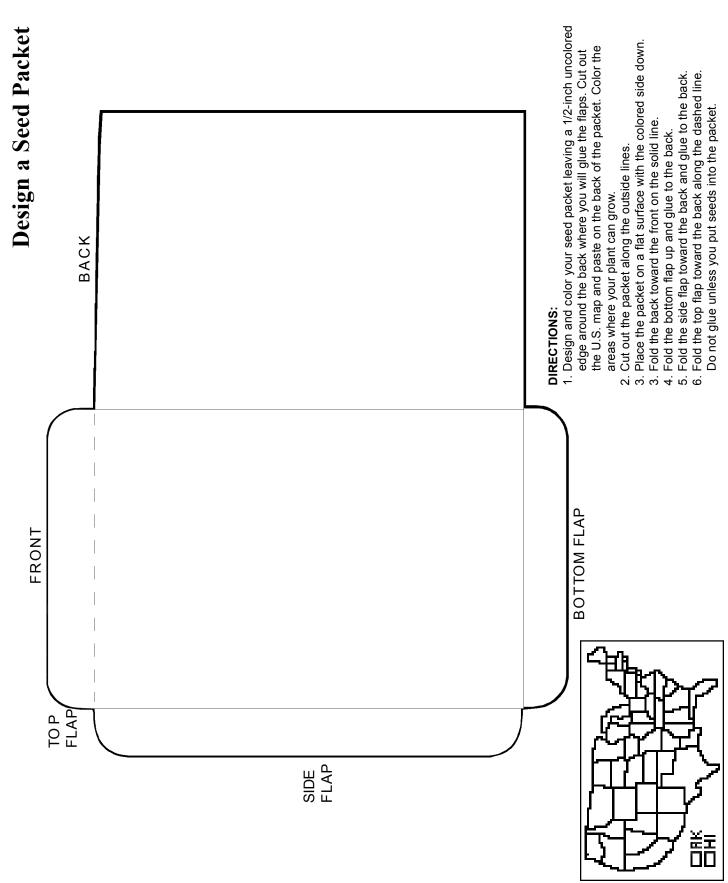
Tips or suggestions (where to use in garden, special needs such as removing faded blossoms, fertilizing)

Tell students that they are to pretend that they've been given the job of designing a new seed packet for a familiar flower, vegetable or herb. Ask each to select one and research it in an encyclopedia, a plant book at the library or on the Web. Find information to put on a seed packet that would be attractive (make someone want to buy it) and informative (help the buyer be successful when planting it). Distribute the handout (page 4). Ask students to design a seed packet, including as many of the types of information in the list above as possible. Draw and color a picture of the plant or cut (with permission) a picture of it from a magazine or catalog and paste it on the packet. If you have a source of seeds for easy-to-grow flowers (sunflower, nasturtium, calendula) or vegetables (radish, lettuce), students could put "surprise" seeds in the packet to take home and plant in a garden or window box as a family project.

My Landscape Plan for







Selected Related Resources

Michigan State Agency Web Sites

Backyard Wildlife Management (Dept. of Natural Resources)

http://www.michigan.gov/dnr/1,1607,7-153-10370 12148-30777--,00.html

The Mann House (Michigan Historical Center, Dept. of History, Arts and Libraries) http://www.michiganhistory.org/museum/musemann/

MDA Kids Korner (Dept. of Agriculture)

http://www.mda.state.mi.us/kids/index.html

Select Michigan Marketplace (Dept. of Agriculture)

http://www.michigan.gov/mda/1,1607,7-125-1570---,00.html

Wildflowers (Dept. of Natural Resources)

http://www.michigan.gov/dnr/1,1607,7-153-10370 12146 12213---,00.html

Other Sites

Gardening with Children, Denver County Cooperative Extension

http://www.colostate.edu/Depts/CoopExt/4DMG/Children/children.htm

Growing Plants, Teacher Zone

http://www.educate.org.uk/teacher_zone/classroom/science/unit1b.htm

I Can Garden!

http://www.icangarden.com/index.cfm

Junior Master Gardener: An International Youth Gardening Program http://imgkids.com/

Kids Gardening, National Gardening Association

http://www.kidsgardening.com/

Fast Plants

http://www.fastplants.org/default.htm

Lady Bird Johnson Wildflower Center

http://www.wildflower.org/

Michigan's 4-H Children's Garden

http://4hgarden.msu.edu/main.html

Thomas Jefferson Center for Historic Plants

http://www.monticello.org/chp/

USDA Hardiness Zone Maps

http://www.growit.com/ZONES/

USDA Plants Database

http://plants.usda.gov/

Lansing Newspapers in Education, Inc.

Provided by the *Lansing State Journal* and the Michigan Historical Center Foundation
Visit the Michigan Historical Center on the Web: www.michiganhistory.org.

Selected commercial Web sites

(Histories of seed companies; images of seed packets to accompany Activity 3)

Antique Seed Packets, Seed Art

http://www.seedart.com/

Pictures of antique seed packets and a history of seed packet art

Burpee

http://www.burpee.com/main.asp

Go to "About Burpee" for a history and time line of the company.

Comstock, Ferre & Co.

http://www.comstockferre.com/history.htm

Began in 1820 selling seeds produced by Shakers

D.M. Ferry-Morse Seed Company history

http://www.ferry-morse.com/history.html

Fredonia Seeds (NK Lawn & Garden)

http://www.nklawnandgarden.com/Garden Seed/Fredonia Seeds/

Miss Twiggley's Antique Flower Seed Packets

http://www.cableone.net/misstwiggley/oldpack.html

Selected Books

Beyond the Bean Seed: Gardening Activities for Grades K-6 by Nancy Allen Jurenka and Rosanne J. Blass. Englewood, CO: Teacher Ideas Press, 1996.

Gardening with Children by Beth Richardson, photographs by Lynn Karlin. Newtown, CT: Taunton Press, 1998.

The Children's Kitchen Garden: A Book of Gardening, Cooking, and Learning by Georgeanne and Ethel Brennan with Marcel Barchechat and the East Bay French-American School, illustrations by Ann Arnold. Berkeley, CA: Ten Speed Press, 1997.

Gardening Wizardry for Kids by L. Patricia Kite; illustrated by Yvette Santiago Banek. Hauppauge, NY: Barron's, 1995.

The Great Seed Mystery for Kids by Peggy Henry; photographs by Alan Copeland and Barry Shapiro; illustrations by Jim Balkovek. NY: Avon Books, 1992 (1993 printing).

Green Thumbs: A Kid's Activity Guide to Indoor and Outdoor Gardening by Laurie Carlson. Chicago, IL: Chicago Review Press: [Distributed by Independent Publishers Group], 1995.

Kids Garden! The Anytime, Anyplace Guide to Sowing & Growing Fun by Avery Hart and Paul Mantell; illustrations by Loretta Braren and Jennie Chien. Charlotte, VT: Williamson Pub. Co., 1996.

Kidsgardening: A Kids' Guide to Messing Around in the Dirt by Kevin Raftery and Kim Gilbert Raftery; illustrated by Jim M'Guinness. Palo Alto, CA: Klutz Press, 1989.

The National Gardening Association Guide to Kids' Gardening: A Complete Guide for Teachers, Parents and Youth Leaders (Wiley Science Editions) by Lynn Ocone with Eve Pranis. NY: Wiley, 1990.

Roots, Shoots, Buckets & Boots: Gardening Together with Children by Sharon Lovejoy. NY: Workman Pub., 1999.